

### **3. How to Think Like Thomas Aquinas**

If you are going to study Thomas Aquinas you must first learn how he thinks. Thomas is very interested in how we humans come to know things. The fancy word for "the study of knowing" is epistemology. Thomas Aquinas has a pretty simple epistemology or "account for how we know things."

Thomas thinks in terms of "sciences" or "bodies of knowledge." We think of science as physics or astronomy. Thomas used the word scientia (Latin for "knowledge") to define bodies of knowledge. These "sciences" are what we would call "subjects" today. For Thomas, the highest "science" is theology, or the study of God's revelation to man. Thomas holds that all truth comes from God. Consequently, all other "sciences" (for example, philosophy, mathematics, and ethics) are in harmony with the theology. As the adage says, "All truth is God's truth."

Now theology is different from all the other sciences. Theological discussions begin with God and then descend from Him to the world. Philosophy, on the other hand, works in the opposite direction. Philosophical discussions begin with knowledge of the world and then ascend to a very limited and abstract understanding of God.

Thomas breaks down the "sciences" into three major classes: theoretical sciences, practical sciences, and productive sciences. As you may have guessed, theoretical knowledge has to do with thinking about the way things are, whereas practical knowledge has to do with changing the way things are.

#### **Theoretical Sciences**

Theology (study of God)  
Metaphysics (study of existence itself)  
Mathematics (study of numbers)

#### **Practical Sciences**

Ethics (study of actions)  
Politics (study of states)

#### **Productive Sciences**

Making brownies  
Building bridges  
Brewing beer  
Splitting an atom

Nowadays we assume only things in the third column are "scientific" because they involve measuring material things. Let's look at an example that will help you understand the difference. Theoretical sciences contemplate "what" a triangle is, whereas productive sciences think about "how" to make a triangle or how to use a triangle. Here is a table showing the difference between theoretical knowledge and practical knowledge with regard to a triangle:

### **Theoretical Knowledge of Triangles**

three sides

three angles

sum of angles equal  $180^\circ$

### **Productive Knowledge of Triangles**

triangles are stronger than squares

triangles are useful for suspension bridges

triangles are effective arrowheads

Incidentally, Thomas' distinction between theoretical knowledge, practical, and productive knowledge relates to his vocation as a Dominican friar. Within the Catholic Church there are those who live a contemplative lifestyle (monks and cloistered nuns) and those who live active or practical lifestyles (bishops, priests, and laypeople). The Dominicans sought to combine both the contemplative and active vocations. Thus, they sought to actually live out a life that embraced theoretical activity and practical activity. This revolutionary approach to Catholicism explains how Thomas Aquinas could be both a mystic and a preacher.

**Your Five Senses are the Gateway to Knowledge:** Thomas did not believe that man was born with innate knowledge. If you think of your mind as a computer, Thomas held it came with a blank hard drive. Certainly, the human mind is already oriented to truth. One might continue the analogy and say the mind came with software preinstalled, but no data. That is to say, the computer came with a word processor, but not with any documents. How then do we gain data? Thomas says that we have five inputs from which we gain all knowledge: our sense of sight, smell, hearing, taste, and touch. This sense data passes through the senses and into the intellect where it is processed. Data comes in (through the senses). Your operating system processes it (active intellect). Information is then saved on the hard drive (your memory).

**Form and Matter:** Thomas Aquinas holds all physical things consist of form and matter. Form is the idea, and matter is the stuff. Take, for example, my wedding

band. The form is the circular, short cylinder shape we know as a ring. The matter is gold. When the jeweler imposes the circular "form" to the golden "matter," it becomes a wedding ring. The form is like the idea or shape of a thing, and the matter is that from which it is made. This distinction between form and matter originally came from Plato. Plato's most famous student, Aristotle, came along and added two more. This is where Thomas Aquinas gets the "four causes":

Formal cause (idea)

Material cause (stuff)

Efficient cause (agent)

Final cause (purpose)

**Four Causes:** The four causes are among the most important "Thomas Aquinas concepts" that you can grasp. Without it, you're stuck in the mud. First of all, do not be confused by the word "cause." Here the word does not mean cause and effect; it means the reason for something. The final cause is the goal or purpose. The formal cause is the idea of thing. The material cause is the stuff from which it is made. The efficient cause is the agent. Let's run through some examples.

**Example: Four Causes of a Novel** - Take the example of a novel. The formal cause is the story itself. The material cause is the cover, spine, paper pages, and ink. The efficient cause is the author who literally writes the novel with pen and paper. The final cause is the purpose for which the author writes. The purpose varies from author to author. Some write for fame. Others for money. Some just want to share a good story.

**Example: Four Causes of a Football Stadium** - Next, take the example a football stadium. What is the formal cause? It is the idea of the stadium - the blueprint. What is the material cause? The material cause is the stone, concrete, iron, gravel, soil, grass, etc. used to make the stadium. What is the efficient cause? Ultimately the efficient cause would be the one who organizes and pays for the stadium—the team owner. The more proximate efficient cause would be the architect who designs it and after that, the actually construction workers who pour the concrete and weld the beams. What is the final cause or purpose? It depends. It could be to make money or to enjoy football.

**Example: Four Causes of a Lasagna** - Now let's take lasagna. The formal cause is the recipe. The material cause is the tomatoes, cheese, pasta, etc. The efficient cause is the cook - your spouse. The final cause, in this case, is to feed the family in a pleasurable way. Philosophy was never so tasty.

**Using the Four Causes for Definitions:** The "four causes" are useful tools in assessing what something is. The four causes help you think and speak clearly. For Thomas Aquinas, an adequate definition always includes the four causes. For example, when Thomas gives the definition for "law," he defines it as "an ordinance of reason for the common good, made by him who has care of the community, and promulgated." The ordinance of reason is the formal cause, and its promulgation in a document is the material cause. The efficient cause or agent is the magistrate or legislative body that promulgates it. The final cause or purpose is the common good.

### **Definition of Law**

ordinance of reason  
promulgated  
made by proper authority  
for the common good

### **Four Causes**

formal cause (idea)  
material cause (stuff)  
efficient cause (agent)  
final cause (purpose)

By including all four causes, a thorough definition of "law" is provided for the reader. This method spilled over into all other sciences. For example, it was used in theology to define such things as sacraments. The formal cause of baptism is the word "I baptized you in the name of the Father and of the Son and of the Holy Spirit." The material cause was the water. The efficient cause was the minister of the sacrament who intended to do what the Church does. The final cause or purpose was to confer grace so as to make a sinner into a Christian. Now that we have come to understand the "four causes" we can now see how Thomas understands human knowledge in the context of "form" and "matter."

**Active intellect and the Potential Intellect:** Thomas quotes Aristotle that the intellect is at first "like a clean tablet on which nothing is written."<sup>3</sup> When we are conceived, our intellect has the potential to know things, but it does not yet know things. This is why Thomas claims the intellect has potential. The human intellect always has the potential to grow. God's intellect does not have the potential to grow. God's intellect is what Thomas calls "pure act" since God is fully actualized and lacking nothing. God knows everything. He is never surprised.

Now then, the human intellect cannot remain empty forever. It comes to know things. Since the human intellect has the potential to know things and then comes to actually know things, Thomas teaches that the human intellect is divided into an active intellect and a potential intellect. The active intellect {intellectus agens} actualizes something in order to make it intelligible.

**Being in a Dark Museum:** The classic example is the way light relates to sight. Imagine you're in a museum full of beautiful paintings. They are all there and you are in the gallery—but the lights are off. The paintings are there and your eyes are fully functional, yet you see nothing. Next, someone switches on the lights. The light enables your eyes to see the colors of the paintings. So it is with the intellect. In this analogy, the light is like the active intellect. The active intellect makes sense of the data that is "out there."

**Being Stung by a Bee:** Thomas derives most of these distinctions from Aristotle. Aristotle says that the potential intellect receives the "form" of an object, but that the active intellect makes the potential knowledge into actual knowledge. The active intellect is responsible for abstraction. This is complicated so let me try to explain it more clearly by outlining the way the intellect works for Thomas:

1. Data enters through the sense faculties (smell of honey, buzzing sound, sharp sting on the face)
2. The active intellect grasps the abstract form of the data ("bee")
3. The data becomes intelligible ("I've been stung by a bee.")

This is how your mind works. It is a step by step process that happens quickly. You usually are not aware of the steps, but they happen.

For Thomas, abstraction is accomplished by the agent intellect when the form is "extracted" from the matter. By making the distinction between the active and potential in the intellect, Thomas preserves the correlation between form and matter in the realm of human understanding. For Thomas, "form" corresponds to "actualization" and "matter" corresponds to "potency."

**Lasagna Entering Your Intellect:** Think back to our example of lasagna. Form is the recipe and matter is the pasta, cheese, tomatoes, etc. The ingredients have the potential to become lasagna, but they are not yet lasagna. However, when the recipe "forms" or "actualizes" the ingredients, you have actual lasagna. Similarly, the active intellect actualizes the sensory data. If the intellect does not receive data through the senses, it has nothing to actualize.

To make matters more complicated, during the life of Thomas Aquinas, the philosophical Averroists in Paris and elsewhere were claiming that the active intellect was one substance and not within every human soul. In other words, the active intellect was substantially separate from human souls and something that all humans shared. According to the Averroists, one billion different people are all using the same active intellect. Aristotle himself may have been ambiguous on this point. However, Thomas Aquinas wanted to insist each person has his own active intellect. In order to defend this position, he cited Aristotle's statement "it is necessary for these differences," namely, the passive and active intellect, "to be in the soul."<sup>5</sup> Thomas Aquinas' interpretation of this problem was convincing and the Averroists were defeated. As we work through the thought of Thomas Aquinas, you will begin to appreciate how much of his system is an attack on the errors of the Averroists.